



# Business Analysis Summary

Olist is a comprehensive e-commerce platform that bridges the gap between SMBs and large online marketplaces. It offers a range of services, including marketplace integration, logistics support, customer service, and analytics, helping sellers streamline their operations and increase their sales. Through its revenue-sharing and subscription-based model, Olist aligns its success with the success of its sellers, driving growth and efficiency in the e-commerce sector

## Key Insights:

### Product Categories:

- Top categories include Home, Sports and Leisure, and Electronics
- Products vary widely in price, from high-value items like furniture to more affordable products like garden tools

### Order Value Distribution:

- Average order value is R\$138, significantly higher than the median order value of R\$87 suggesting a right-skewed distribution with a long tail of higher-value orders
- Higher-value orders, although fewer in number, have a substantial impact on total sales

### High-Value Orders:

- Olist has 1.7k orders that are over R\$1,000 in value contributing to R\$1.5M in total sales
- The 1.7k orders make up less than 2% of total orders but account for over 11% of total sales
- About 75% of orders are roughly under R\$150
- The top 25 percentile by order value show a range of roughly R\$150 to as high as R\$13k
- high-value orders suggests the occurrence of bulk purchases or the sale of big-ticket items

### Customer reviews:

- High variability in sales month to month contributed to poor delivery performance and lower customer satisfaction scores

### Sellers:

- Olist has a concentration of top sellers where 17.5% of sellers are accountable to 80% of total sales

## Possible Strategic Initiatives:

### Target Marketing and Customer Segmentation:

- Segment high-value and low-value customers
- Implement a loyalty program or exclusive benefits for high-spending customers to increase retention and encourage repeat purchases
- Segment based on categorical interests

### Enhanced Sales Forecasting

- Inaccurate sales forecasts can have a ripple effect and can lead to issues with inventory, delivery performance, and customer satisfaction
- Forecasting is the foundational piece in planning
- Understand if logistics partners have optimal capacity

### Seller Management:

- Provide additional support and resources to top sellers who contribute significantly to total sales
- This could include dedicated account managers, advanced analytics tools, and marketing support
- Implement programs to help smaller sellers grow and improve their performance
- This could involve training, resources on best practices, and incentives for meeting sales targets

# Total Sales by Category and Subcategory

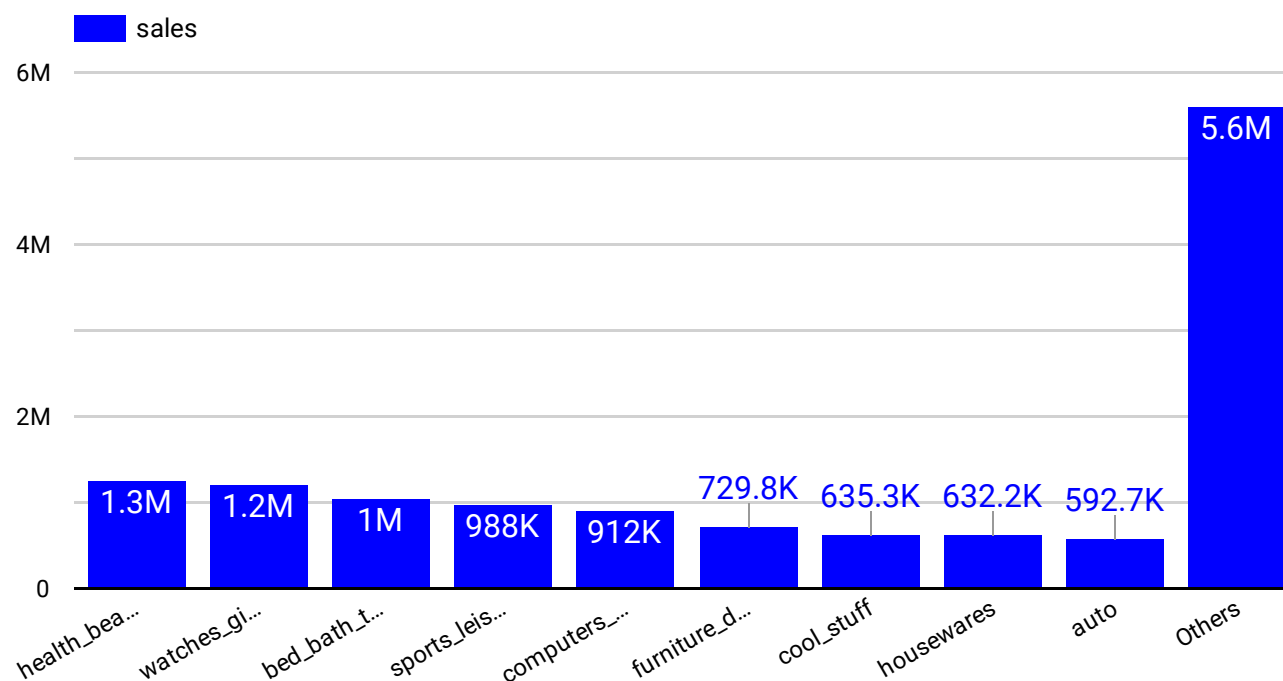
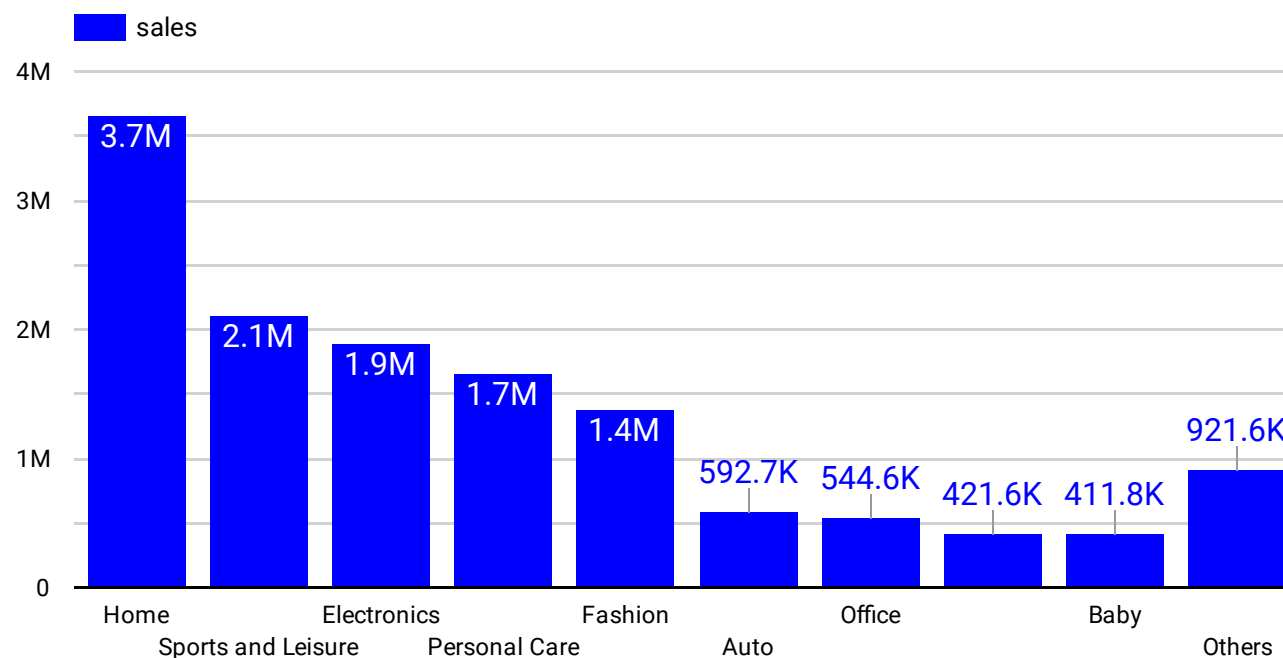
# of Unique Products

32,951

Interactive cross-filtering enabled: click on any of the categories in the table or any of the bars in the charts to filter the other visuals. All visuals can show either Category or Subcategory just by using the drilldown arrows in each visual

	category	sales
1.	Home	3.7M
2.	Sports and Leisure	2.1M
3.	Electronics	1.9M
4.	Personal Care	1.7M
5.	Fashion	1.4M
6.	Auto	592.7K
7.	Office	544.6K
8.	null	421.6K
9.	Baby	411.8K
10.	Books, Music, and Movies	281.8K
11.	Tools	267.9K
12.	Pets	214.3K
13.	Misc	90.6K
14.	Food and Beverage	67K
	Grand total	13.6M

1 - 14 / 14



# Descriptive Statistics (bins of 100)

Order Count

100.0K

Total Sales

13.7M

Avg Order Value

138.34

Med Order Value

87

Max Order Value

13,440

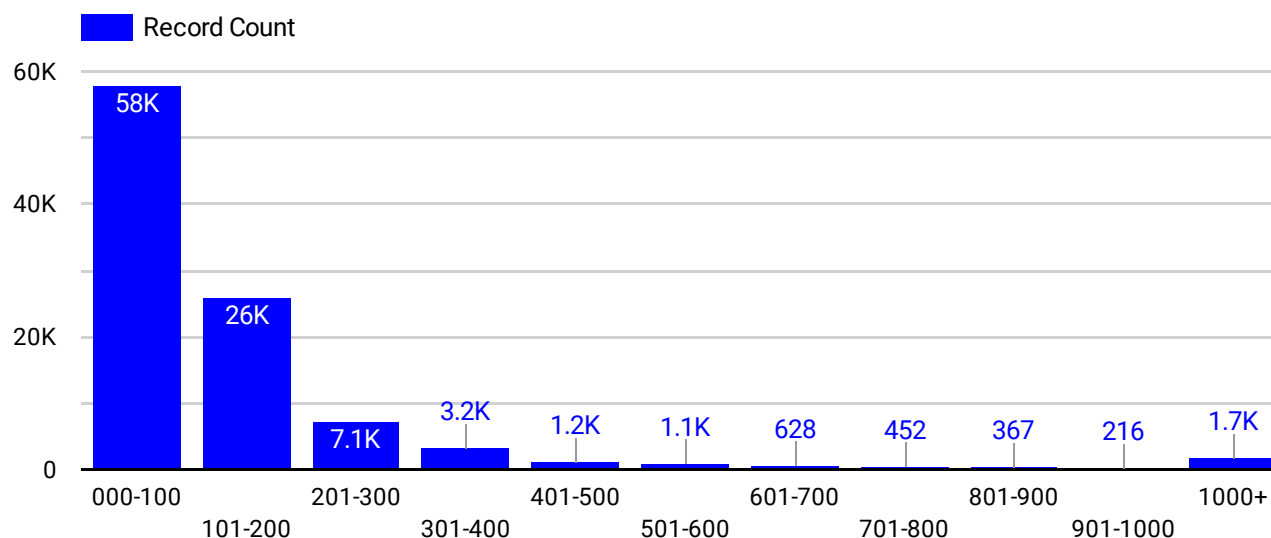
Min Order Value

0.85

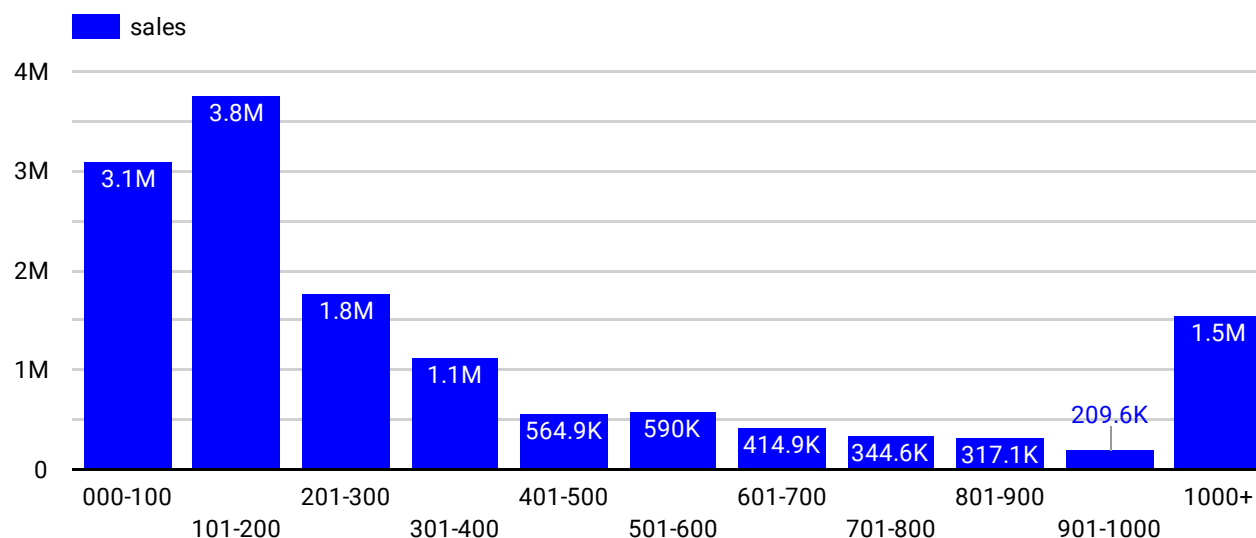
STD Order Value

211.13

Order Value Distribution



Sales by Order Value Bin



Average order value for Olist has a much higher mean of R\$138 than the median of R\$87, which suggests a long tail of higher-value orders. This is visually evident in the histograms, where the distribution of order values shows a significant number of high-value orders that elevate the average. Specifically, we can see that 1.7k orders were over R\$1000 and made up R\$1.5M in total sales. This indicates that less than 2% of total orders contributed to over 11% of total sales.

This disparity highlights the importance of high-value orders in driving overall revenue. While the majority of orders are clustered around lower values, the presence of these high-value orders significantly impacts the business's financial performance.

This insight can guide strategic decisions in several areas:

- customer segmentation
- product and pricing
- inventory management
- sales and revenue forecasting

# Descriptive Statistics (bins of 10)

Order Count

100.0K

Total Sales

13.7M

Avg Order Value

138.34

Med Order Value

87

Max Order Value

13,440

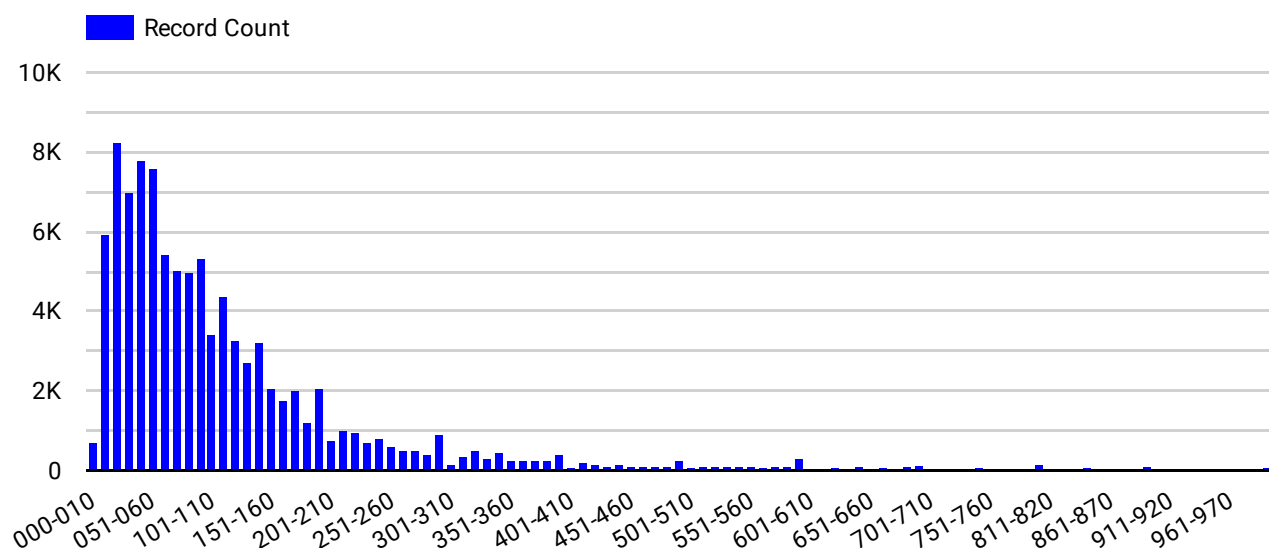
Min Order Value

0.85

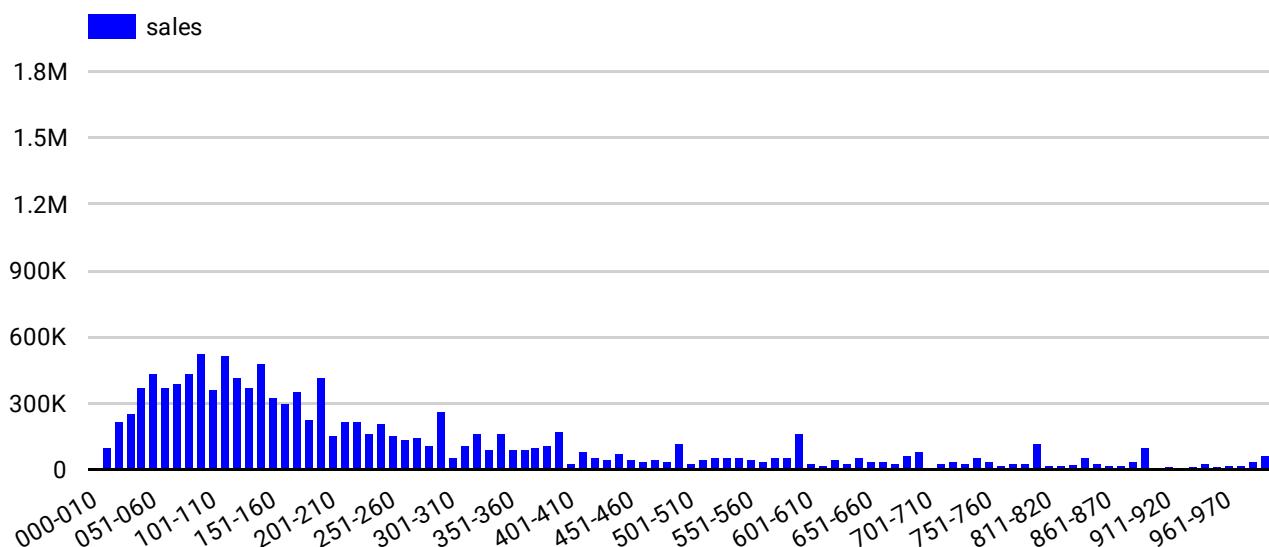
STD Order Value

211.13

Order Value Distribution



Sales by Order Value Bin



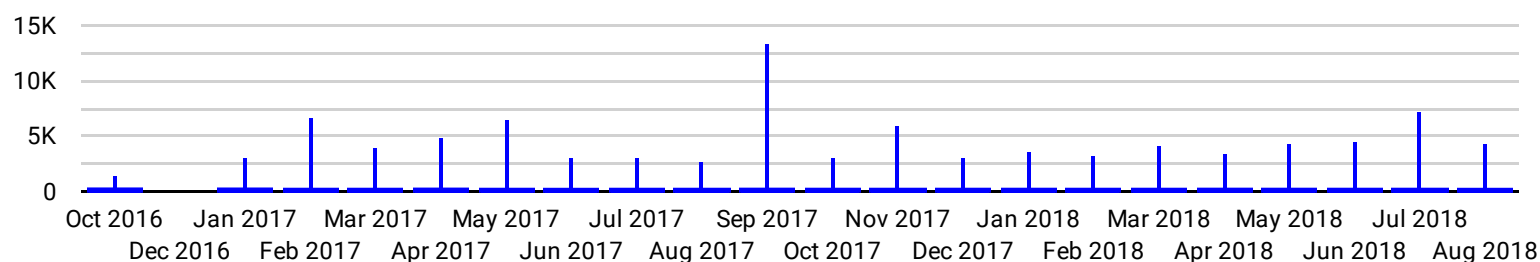
Average order value for Olist has a much higher mean of R\$138 than the median of R\$87, which suggests a long tail of higher-value orders. This is visually evident in the histograms, where the distribution of order values shows a significant number of high-value orders that elevate the average. Specifically, we can see that 1.7k orders were over R\$1000 and made up R\$1.5M in total sales. This indicates that less than 2% of total orders contributed to over 11% of total sales.

This disparity highlights the importance of high-value orders in driving overall revenue. While the majority of orders are clustered around lower values, the presence of these high-value orders significantly impacts the business's financial performance.

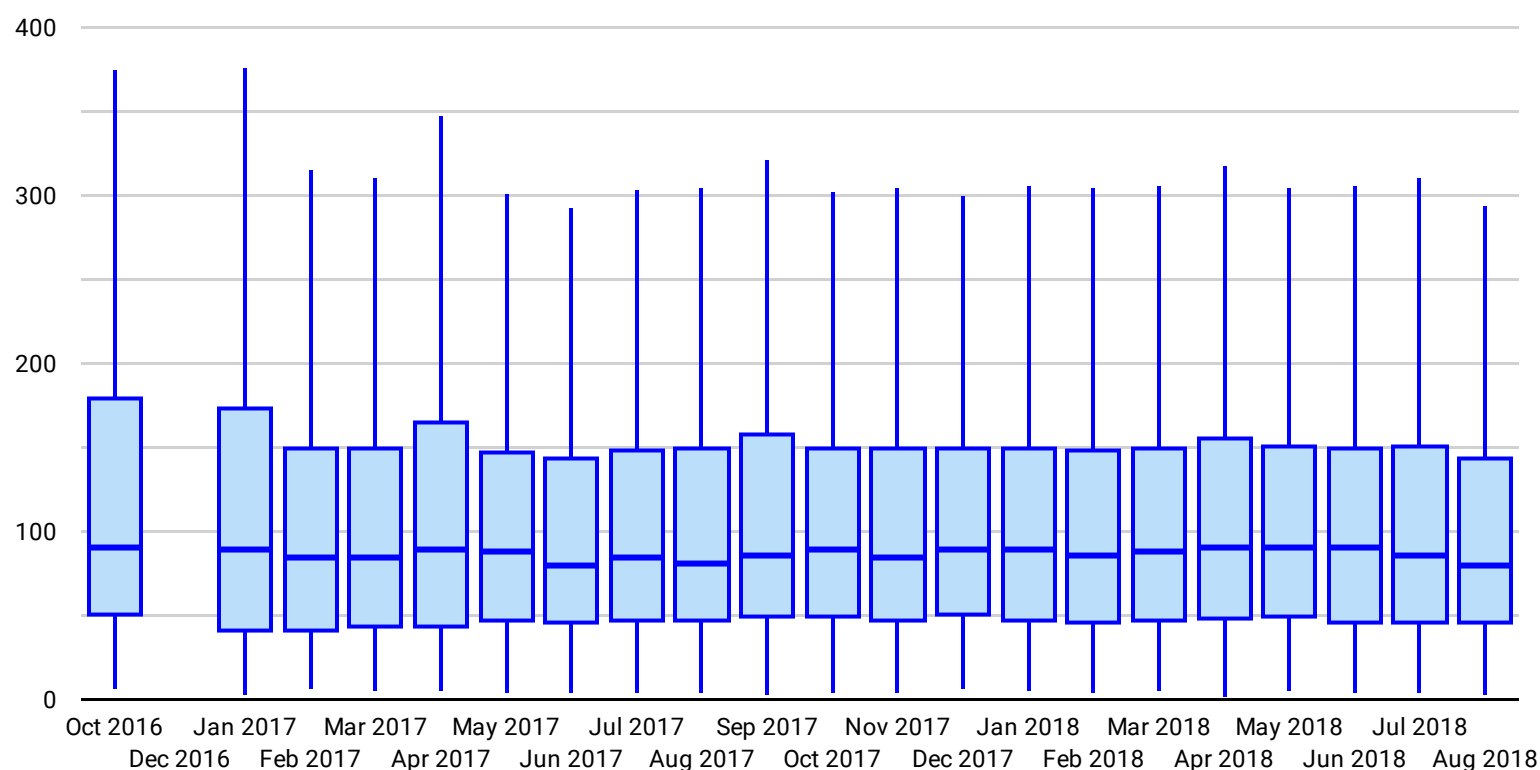
This insight can guide strategic decisions in several areas:

- customer segmentation
- product and pricing
- inventory management
- sales and revenue forecasting

Order Value Boxplots (upper whisker extends to max value)



Order Value Boxplots (traditional boxplot)

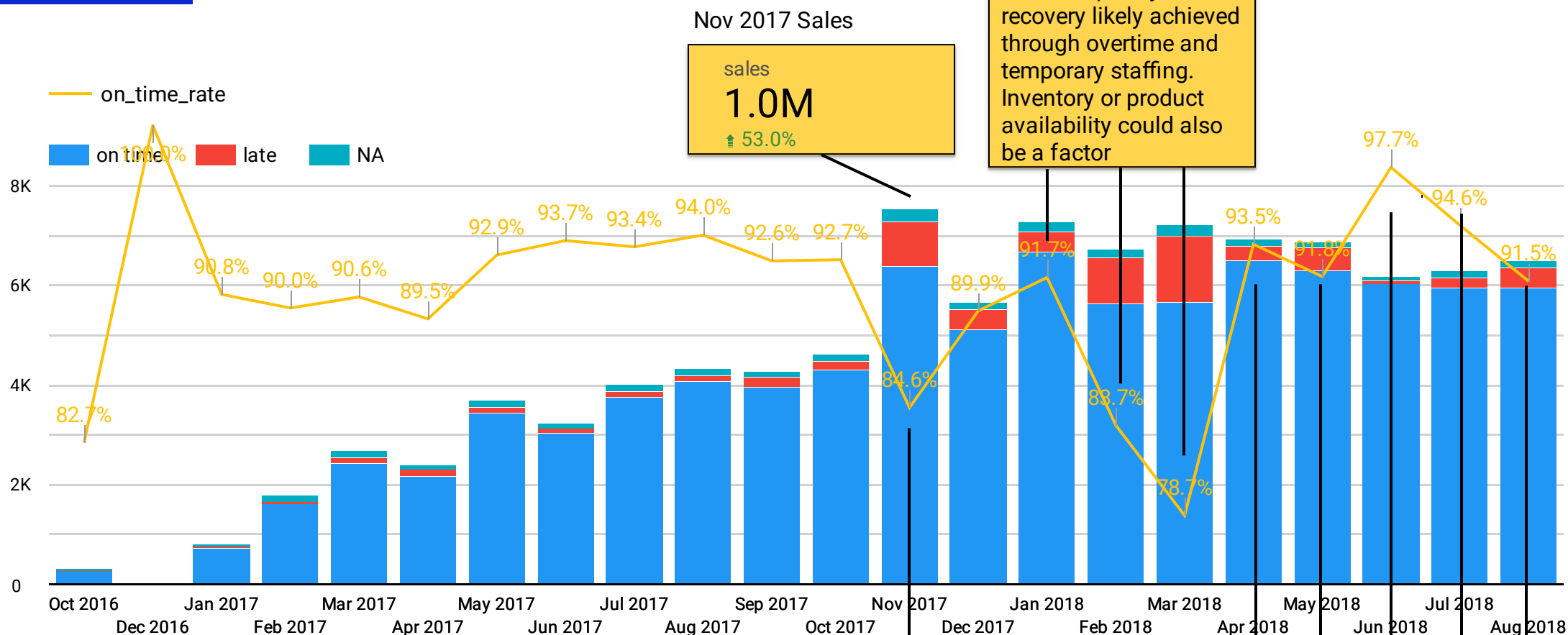


The boxplots provide insightful visual representations of order values across different months. They reveal that about 75% of the orders are roughly under R\$150 for the majority of months where we have sales data. This indicates that the bulk of Olist's orders are relatively modest in value.

Additionally, the boxplots show that the maximum order value has reached as high as R\$13,000, and orders beyond the 75th percentile can vary drastically in size. This wide range of order values could indicate the following:

- Diverse customer base
- High variety in product offerings
- High variability in product pricing including big-ticket items
- Selling items in bulk

## Sales and On Time Rate Trends



order_purchase_timestamp (Year Month)		sales
1.	Nov 2017	1,025,727
2.	Apr 2018	1,003,943
3.	May 2018	998,018
4.	Mar 2018	991,779
5.	Jan 2018	962,358
6.	Jul 2018	903,718
7.	Jun 2018	867,469
8.	Feb 2018	862,815
Grand total		13,729,234

Initial dip to 84.6% on time rate likely due to 53% MoM spike in sales month to month.

Sustained on time performance from Apr 2018 and on, likely due to adding long-term capacity and improved processes, possibly added another logistics partner.



# Customer Review Trends

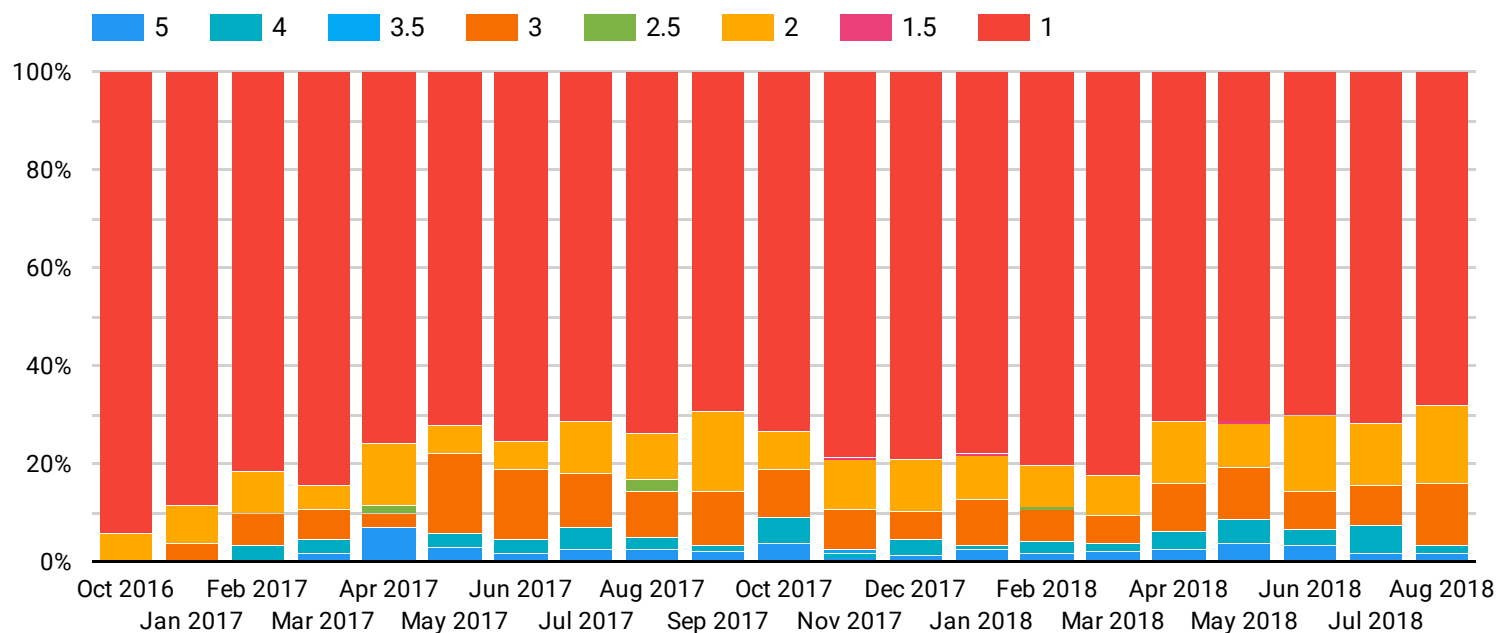
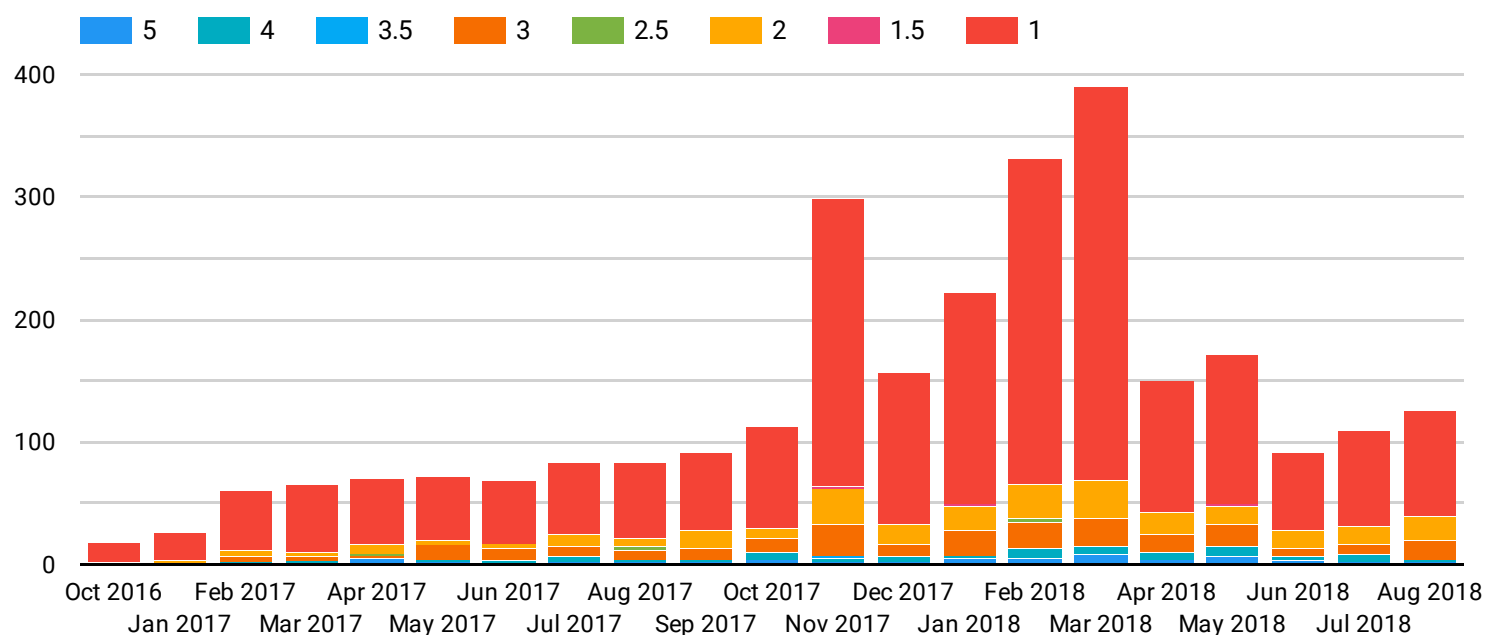
	review_cat	Record Count ▾
1.	did_not_leave_a_review	59,109
2.	Uncategorized	19,484
3.	good_experience	8,089
4.	arrived_early	6,673
5.	<b>did_not_receive</b>	<b>2,804</b>
6.	good_quality	2,797
7.	poor_quality	397
8.	wrong_product	346
9.	poor_experience	330

1 - 9 / 9



click on above review categories to filter the visuals on the right.

If we filter on "did\_not\_receive" or "poor\_experience" we can see the poor reviews correlate with the big increase in sales starting Nov 2017. Highlighting the importance of accurate forecasting

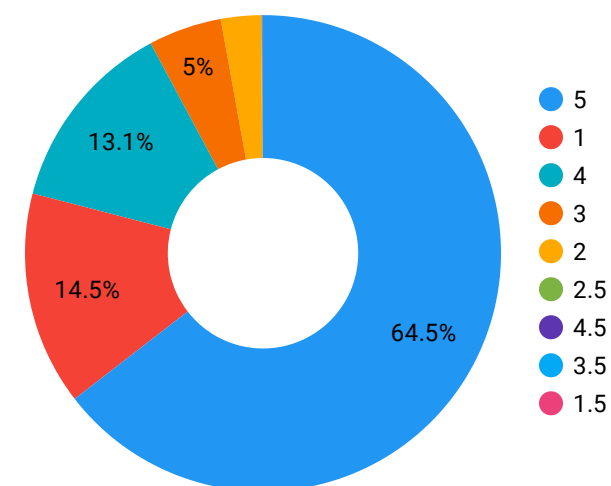


# Customer Reviews by Review Category

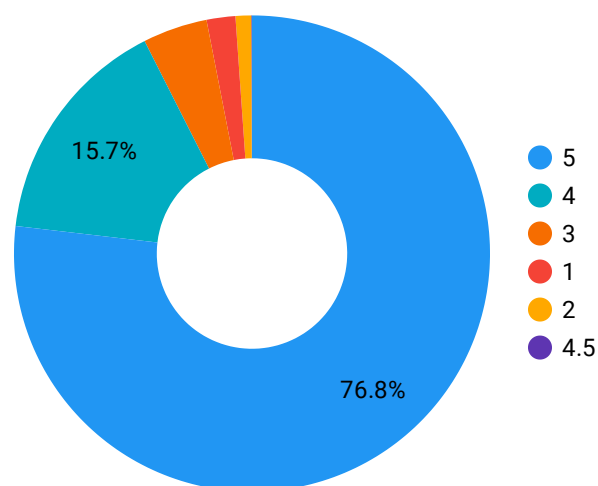
review_score / Record Count									
review_cat	1	1.5	2	2.5	3	3.5	4	4.5	5
good_experience	158	-	86	-	355	-	1,270	4	6,216
arrived_early	84	-	44	2	167	2	867	2	5,505
did_not_receive	2,152	3	278	5	236	2	70	-	58
good_quality	45	-	34	-	179	1	553	1	1,984
poor_quality	241	1	57	-	65	-	18	-	15
wrong_product	221	-	42	4	34	-	21	-	24
poor_experience	211	-	43	-	31	-	16	-	29
<b>Grand total</b>	<b>3,112</b>	<b>4</b>	<b>584</b>	<b>11</b>	<b>1,067</b>	<b>5</b>	<b>2,815</b>	<b>7</b>	<b>13,831</b>

records without a review and that were not categorized were excluded from the analysis

**Crossfilter:** Filter by clicking categories in table to the left

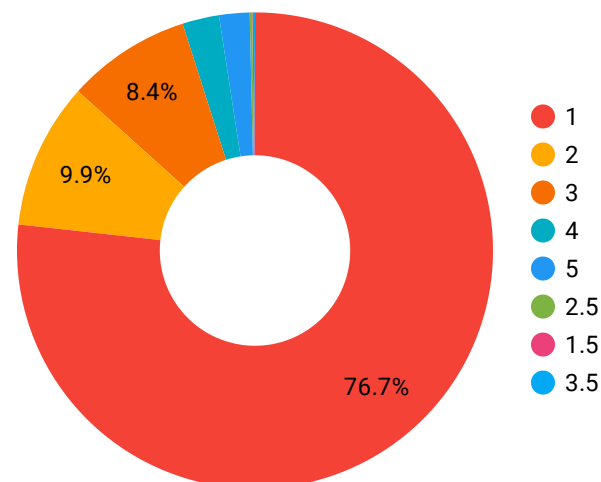


## Good Experience



**Good Experience:** This review category had the most 5 reviews and shows how a good experience translates to high review scores. Over 90% of reviews in this category scored between 4 and 5.

## Did Not Receive



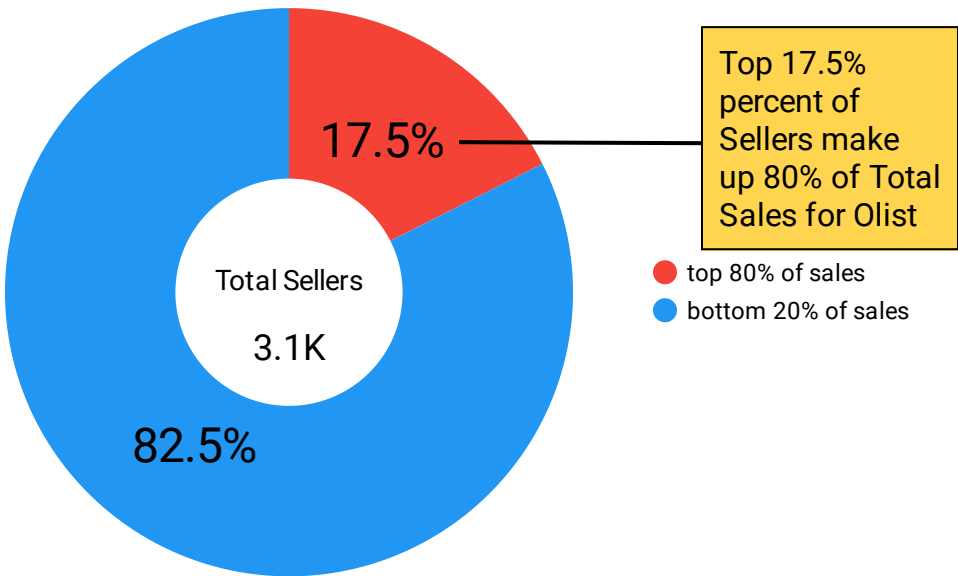
**Did Not Receive:** This review category had the most 1 reviews and shows how critical it is to get customers their orders on time. Over 85% of reviews in this category scored between 1 and 2.



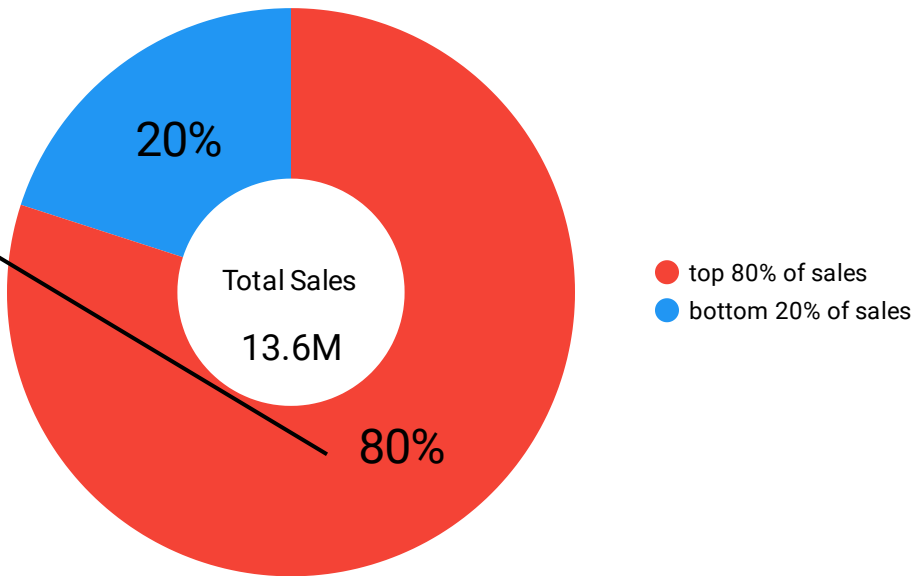


# Pareto Principle or 80/20 rule

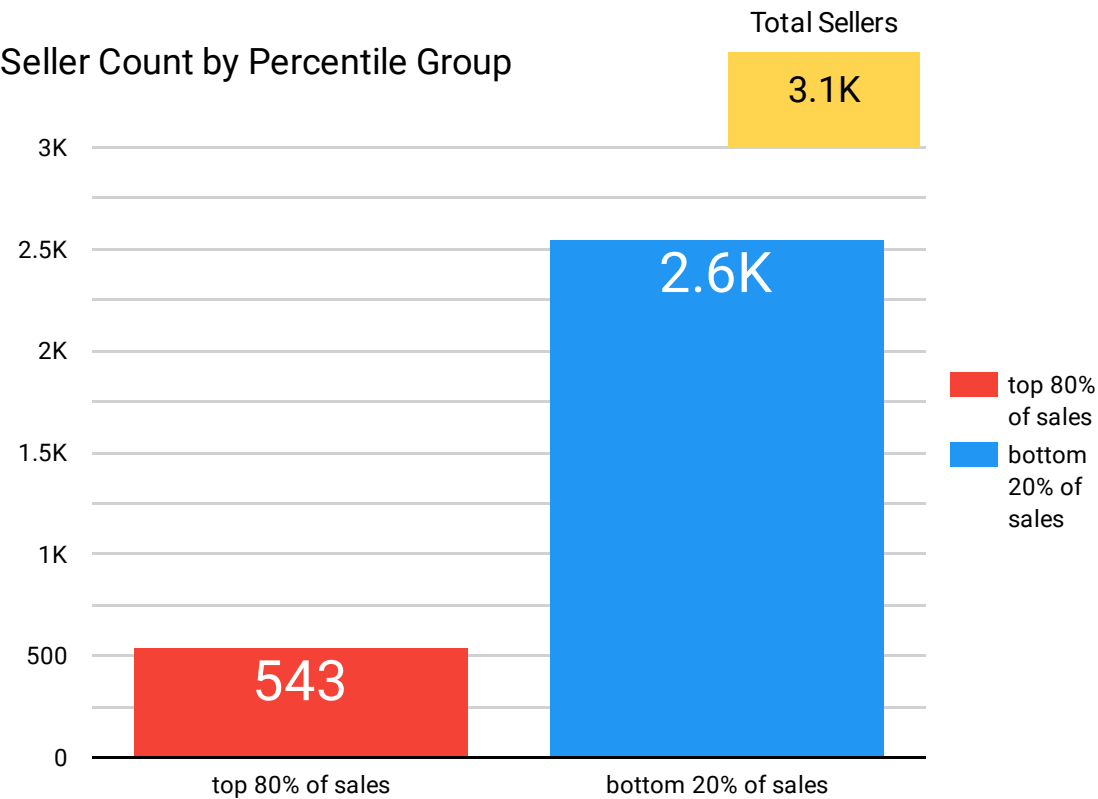
Seller % by Sales Percentile Group



Sales % by Sales Percentile Group



Seller Count by Percentile Group



Sales by Percentile Group

